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09/989,913	11/20/2001	Theresa M. Buckley	BUC1073C2	2206

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3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER	
ZACHARIA, RAMSEY E	
ART UNIT	**PAPER NUMBER**
1773	20

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A 5-20

Office Action Summary	Application No.	Applicant(s)	
	09/989,913	BUCKLEY, THERESA M.	
	Examiner	Art Unit	
	Ramsey Zacharia	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-106* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-76,81-86,88-96 and 98-106* is/are rejected.

7)☒ Claim(s) *77-80,87 and 97* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *18* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Information Disclosure Statement

2. Reference A61 in the information disclosure statement filed 26 September 2003 has been lined through because it fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 by denoting the date of publication.

Claim Objections

3. Claims 66, 76-78, 93, and 94 are objected to because of the following informalities: in claim 66 the word "of" at the end of line 2 should be deleted; in claims 76-78, 93, and 94 the phrase "to per cubic foot" should be replaced with the phrase --per cubic foot--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 47, 49, 55, 61, 63-70, 88-95, and 98-103 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. According to the

remarks filed 26 September 2003, the lower limit of 1.22 BTU per square foot corresponds to a Q_{equil} value of 19.98 BTU/hr in Example 2. However, the Q_{equil} value in Example 2 appears to be 19.9 and not 19.98 (page 21, line 27). The origin of the 19.98 BTU/hr value is not evident; even if the actual value was rounded off to the nearest tenth in the specification, 19.98 would have rounded off to 20.0 and not the 19.9 reported in the specification on page 21, line 27.

5. Claims 98-106 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. The upper limits of the range of thermal loading in claims 98-106 appears to be derived from arbitrarily chosen points within disclosed ranges (2.2 hrs for claims 98-100, 7 hrs for claims 101-103, and 3 hrs for claims 104-106). However, since these times were not explicitly recited, explicitly reciting them or values derived from them constitutes new matter. *In re Wertheim*, 191 USPQ 90 (CCPA 1976).

6. Claim 94 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. No support could be found directly in the original disclosure or indirectly from manipulations of data in the specification.

7. Claim 84 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. No support could be found directly in the original disclosure or indirectly from manipulations of data in the specification. The remarks filed 26 September 2003 indicate that the values in claim 84 (4.88 to 12.06 BTU/ft^2) were obtained by multiplying the value in claim 50 by 4 to 9 hours recited in claim 56. However, the thermal loading in claim 50 is 0.82 BTU, multiplying this value by 4 to 9 hours would yield a range of 3.28 to 7.38 BTU•hr, not 4.88 to 12.06 BTU/ft^2.

8. Claims 76, 81, 91, and 93 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection. A thermal loading of 4480 BTU/ft^3 of the article constitutes new matter because the value is calculated is actually the thermal loading of this solid, or nearly solid, layer of phase change material in a multilayered article. Therefore, it is not the thermal loading per volume of the article, but rather it is the thermal loading per volume of one layer of the article.

Claim Rejections - 35 USC § 102

9. Claims 50, 52-54, 56-58, 83, 85, and 86 are rejected under 35 U.S.C. 102(b) as anticipated by Bryant et al. (U.S. Patent 4,756,958).

Bryant et al. teach a fabric comprising a fiber having microcapsules encapsulating one or more phase change materials (column 2, lines 25-42). The phase change material may be a paraffin hydrocarbon exhibiting a solid-liquid transition or a plastic crystal exhibiting a solid-solid transition at or below room temperature (column 3, lines 23-55). The fabric may be formed into items of clothing (column 4, lines 37-42). Bryant et al. disclose phase change materials having a transition temperature of from -5.5 to 61.4 °C, i.e. about 22 to 142 °F (column 3, lines 40-55). Specific examples of transition temperatures including 10 °C, 18.2 °C, and 22 °C, which are about 50, 64, and 72 °F, respectively. The fabric can be used to make gloves, shoes, and environmental suits (column 4, lines 14-42).

Regarding the limitation that the article is for metabolic cooling and for insulation of a user in a cold ambient environment below a phase transition temperature of a thermal storage material, this is not a material limitation but rather an intended use of the article. That is, the article is intended to be used for metabolic cooling and insulation in a cold ambient environment. It has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

The limitation in claims 56 and 83 that the thermal mass is sufficient to maintain the phase change material in a partially solid and partially liquid state for a specified duration when the thermal capacitor is exposed to an ambient environment below the actual phase transition

temperature of the phase change material on one side and metabolic heat on another side is also dependent on the rate of heat flow between the body and the capacitor and the rate of heat flow between the capacitor and the ambient environment. Since these rates are functions of the body and ambient temperatures, respectively, the rates are a function of the intended use of the article.

Regarding the thermal loading limitations in claims 50, 85 and 86, this is a function of the size of the fabric since these thermal loadings are claimed as overall values and not on a per area or per volume basis. Because Bryant et al. teach that their fabric may be used to form small articles such as gloves and shoes as well as large articles such as environmental suits and shieldings for individuals and machinery column 4, lines 14-42), the size of the resulting fabric is a function of its intended use. Presumably there will be some sizes of fabric that meet the claimed thermal loading limitations.

10. Claims 50-52, 54, 56-58, 83, 85, and 86 are rejected under 35 U.S.C. 102(e) as anticipated by Salyer (U.S. Patent 5,106,520) as evidenced by Bruemmer et al. (U.S. Patent 5,176,672).

Salyer teaches free flowing particles of silica with phase change material absorbed into the silica that may be incorporated into garments (column 2, lines 10-27). The garment may be a jacket (Figure 6). Alkyl hydrocarbons having a chain length of C_{14} and greater are the preferred phase change material, these exhibit a solid-liquid transition (column 4, lines 11-20). Blends of these phase change materials may be used (column 5, lines 35-44). The transition temperatures of these materials range from 0 to 33 °C, i.e. about 32 to 91 °F (column 5, lines 35-44). In garment applications, the silica particles are encapsulated in pouches (Figure 7 and column 8,

lines 49-59). Silica is taken to be a superabsorbent material since Bruemmer et al. discloses that silica is considered a superabsorbent material (column 8, lines 30-33). Insulation may be added to minimize heat flow between the phase change material and the environment (column 9, line 37-column 10, lines 4). Regarding claims 51, this insulation reads on the insulative layer and the liquid impervious enclosure facing the wearer reads on the thermal control layer since the insulative layer will inherently have a higher insulative value than the liquid impervious layer because it is designed to minimize heat flow to the environment while the garment as a whole is designed to permit heat flow between the phase change material and the wearer.

Regarding the limitation that the article is for metabolic cooling and for insulation of a user in a cold ambient environment below a phase transition temperature of a thermal storage material, this is not a material limitation but rather an intended use of the article. That is, the article is intended to be used for metabolic cooling and insulation in a cold ambient environment. It has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

The limitation in claims 56 and 83 that the thermal mass is sufficient to maintain the phase change material in a partially solid and partially liquid state for a specified duration when the thermal capacitor is exposed to an ambient environment below the actual phase transition temperature of the phase change material on one side and metabolic heat on another side is also dependent on the rate of heat flow between the body and the capacitor and the rate of heat flow between the capacitor and the ambient environment. Since these rates are functions of the body and ambient temperatures, respectively, the rates are a function of the intended use of the article.

Regarding the thermal loading limitations in claims 50, 85 and 86, this is a function of the size of the article, such as a blanket, vest, etc., since these thermal loadings are claimed as overall values and not on a per area or per volume basis. Presumably there will be some sizes of blankets, etc. that meet the claimed thermal loading limitations.

Claim Rejections - 35 USC § 103

11. Claims 24-26, 28-30, 34, 35, 38, 39, 41, 43-48, 50, 52-62, 65-67, 69, 71-76, 81-83, 85, 86, 88-91, 93, 95, 96, and 101-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant et al. (U.S. Patent 4,756,958) in view of Hearst (U.S. Patent 3,536,058) and Feldman (U.S. Patent 2,515,298).

Bryant et al. teach a fabric comprising a fiber having microcapsules encapsulating one or more phase change materials (column 2, lines 25-42). The phase change material may be a paraffin hydrocarbon exhibiting a solid-liquid transition or a plastic crystal exhibiting a solid-solid transition at or below room temperature (column 3, lines 23-55). The fabric may be formed into items of clothing (column 4, lines 37-42). Bryant et al. disclose phase change materials having a transition temperature of from -5.5 to 61.4 °C, i.e. about 22 to 142 °F (column 3, lines 40-55). Specific examples of transition temperatures including 10 °C, 18.2 °C, and 22 °C, which are about 50, 64, and 72 °F, respectively. The fabric can be used to make gloves, shoes, and environmental suits (column 4, lines 14-42).

Bryant et al. are silent regarding the thermal loading of their fabric. However, thermal loading is a resulted effective variable and the fabric of Bryant et al. is intended to use a heating

phase change material in cold environments or a cooling phase change material in hot environments.

Hearst and Feldman are both directed to articles employing phase change material to provide warmth in a cold environment or heat in a cold environment. According to the applicant's response filed 26 September 2003, the thermal loading per area in Hearst and Feldman may be estimated to be 28.4 BTU/ft^2 and 75 and above BTU/ft^2, respectively, and the thermal loading per volume may be estimated to be 9494.5 BTU/ft^3 and 3600 and above BTU/ft^3, respectively (including open ended limitations such as at least 12.33 BTU/ft^3).

Since the thermal loading of phase change material in the fabric of Bryant et al. is a results effective variable, it would be obvious to one of ordinary skill to optimize this thermal loading. One would expect the resulting thermal loading to be in the range of about 28.4 to 75 BTU/ft^2 and about 3600-9494.5 BTU/ft^3 since this is the thermal loading of Hearst and Feldman, and the articles of Hearst and Feldman are designed to operate in the same manner as that of Bryant et al. The resulting thermal loading would then meet the limitations of any claim that recites a range overlapping about 28.4 to 75 BTU/ft^2 and about 3600-9494.5 BTU/ft^3.

Bryant et al. also do not teach using the fabric to form liner, wet suit, or ski boot. However, the fabric may be formed into items of clothing, such as gloves or shoes (column 4, lines 37-42).

Liners (such as socks), wet suits, and ski boats are all items of clothing. Since the fabric of Bryant et al. is explicitly taught as suitable for making clothing in general, it would have been obvious for one of ordinary skill to make any article of clothing.

See the discussion above regarding the thermal loading limitations directed to overall thermal loading as opposed to thermal loading on a per area or per volume basis.

Therefore, the inventions of claims 24-26, 28-30, 34, 35, 38, 39, 41, 43-48, 50, 52-62, 65-67, 69, 71-76, 81-83, 85, 86, 88-91, 93, 95, 96, and 101-103 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

12. Claims 24-27, 29-32, 34-67, 69-76, 81-83, 85, 86, 88-91, 93, 95, 96, and 101-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salyer (U.S. Patent 5,106,520) in view of Hearst (U.S. Patent 3,536,058) and Feldman (U.S. Patent 2,515,298).

Salyer teaches free flowing particles of silica with phase change material absorbed into the silica that may be incorporated into garments (column 2, lines 10-27). The garment may be a jacket (Figure 6). Alkyl hydrocarbons having a chain length of C_{14} and greater are the preferred phase change material, these exhibit a solid-liquid transition (column 4, lines 11-20). Blends of these phase change materials may be used (column 35-44). The transition temperatures of these materials range from 0 to 33 °C, i.e. about 32 to 91 °F (column 5, lines 35-44). In garment applications, the silica particles are encapsulated in pouches (Figure 7 and column 8, lines 49-59). Silica is taken to be a superabsorbent material since Bruemmer et al. discloses that silica is considered a superabsorbent material (column 8, lines 30-33). Insulation may be added to minimize heat flow between the phase change material and the environment (column 9, line 37-column 10, lines 4). Regarding claims 32 and 51, this insulation reads on the insulative layer and the liquid impervious enclosure facing the wearer reads on the thermal control layer since the insulative layer will inherently have a higher insulative value than the liquid impervious layer

because it is designed to minimize heat flow to the environment while the garment as a whole is designed to permit heat flow between the phase change material and the wearer.

Salyer is silent regarding the thermal loading of the garment. However, thermal loading is a resulted effective variable and the garment of Salyer is intended to use a heating phase change material in cold environments or a cooling phase change material in hot environments.

Hearst and Feldman are both directed to articles employing phase change material to provide warmth in a cold environment or heat in a cold environment. According to the applicant's response filed 26 September 2003, the thermal loading per area in Hearst and Feldman may be estimated to be 28.4 BTU/ft^2 and 75 and above BTU/ft^2, respectively, and the thermal loading per volume may be estimated to be 9494.5 BTU/ft^3 and 3600 and above BTU/ft^3, respectively (including open ended limitations such as at least 12.33 BTU/ft^3).

Since the thermal loading of phase change material in the garment of Salyer is a results effective variable, it would be obvious to one of ordinary skill to optimize this thermal loading. One would expect the resulting thermal loading to be in the range of about 28.4 to 75 BTU/ft^2 and about 3600-9494.5 BTU/ft^3 since this is the thermal loading of Hearst and Feldman, and the articles of Hearst and Feldman are designed to operate in the same manner as that of Salyer. The resulting thermal loading would then meet the limitations of any claim that recites a range overlapping about 28.4 to 75 BTU/ft^2 and about 3600-9494.5 BTU/ft^3.

Salyer also does not teach that the garment is a wet suit, ski boot, shoe, or sock.

Liners (such as socks), wet suits, and ski boats are all items of clothing. Since the article of Salyer is explicitly taught as suitable for making garments in general, it would have been obvious for one of ordinary skill to make any article of garment.

See the discussion above regarding the thermal loading limitations directed to overall thermal loading as opposed to thermal loading on a per area or per volume basis.

Therefore, the inventions of claims 24-27, 29-32, 34-67, 69-76, 81-83, 85, 86, 88-91, 93, 95, 96, and 101-103 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

13. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant et al. (U.S. Patent 4,756,958) in view of Hearst (U.S. Patent 3,536,058), Feldman (U.S. Patent 2,515,298), and Ellsworth (U.S. Patent 3,969,551).

Bryant et al. taken in view of Hearst and Feldman teach a fabric for making garments that comprises a phase change material within a fiber having all the limitations of claim 31, as outlined above, except for specifying that the fiber is cellulose. Bryant et al. do teach that the fiber may be polyester, nylon (i.e. polyamide), or acrylic.

Ellsworth discloses that textiles used in making apparel is commonly made from a variety of fibers including cellulosic fibers as well as polyamide, polyester, and polyacrylic fibers (column 2, lines 55-64).

Ellsworth shows that polyester, nylon, acrylic, and cellulosic fibers known in the art as equivalent materials for forming fabrics to be used in the garment industry. Therefore, because these materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute cellulosic fibers for the polyester, nylon, or acrylic fibers of Bryant et al.

Therefore, the invention of claim 31 would have been obvious to one of ordinary skill in the art at the time the invention was made.

14. Claims 33 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salyer (U.S. Patent 5,106,520) in view of Hearst (U.S. Patent 3,536,058), Feldman (U.S. Patent 2,515,298), and Moretz et al. (U.S. Patent 5,217,782).

Salyer taken in view of Hearst and Feldman teach a garment that meets all the limitations of claims 33 and 68, as outlined above, except for the presence of a wicking layer and semi-permeable layer that is permeable to water vapor but impermeable to liquid water.

Moretz et al. teach a moisture management panel for incorporation into garments to prevent the garment from chafing and irritating the wearer and minimize conditions conductive to bacteria, fungus, and yeast growth (column 1, lines 7-27). The panel comprises a hydrophilic transport layer, i.e. a wicking layer (column 4, lines 10-17). The panel also comprises a an outer layer that is treated so as to permit evaporation (i.e. permeable to water vapor) but still prevent liquid penetration (column 4, lines 38-43).

One of ordinary skill in the art would be motivated to incorporate the moisture management panel of Moretz et al. into the garment of Salyer to prevent the garment from chafing and irritating the wearer and minimize conditions conductive to bacteria, fungus, and yeast growth.

Therefore, the inventions of claims 33 and 68 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

Response to Arguments

15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

16. Claims 77-80, 87, and 97 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter.

The inventions of claims 77-80 and 87 are directed to a garment or material or footwear comprising a buffering thermal storage material comprising a phase change material having at least one actual phase transition temperature between 41.9 and 80.6 °F and a thermal loading of 12.33-104.08 BTU/ft^3, 104.08-300.13 BTU/ft^3, 300.13-784.7 BTU/ft^3, 787.7-1120.08 BTU/ft^3, and 12.3-1120.08 BTU/ft^3, respectively.

Bryant et al. and Salyer represent the closest prior art. However, neither reference teaches nor fairly suggests an article as claimed having a thermal loading within the ranges recited above.

The invention of claim 97 is directed to a garment or material comprising a buffering thermal storage material comprising a phase change material having at least one actual phase transition temperature between 41.9 and 80.6 °F and a thermal loading of at least 12.33 BTU/ft3 wherein there are at least two layers of phase change materials with different transition temperatures. The transition temperature of the inner layer is greater than that of the outer layer.

Bryant et al. and Salyer represent the closest prior art. However, neither reference teaches nor fairly suggests an article as claimed having at least two layers of phase change material with different transition temperatures wherein the phase change material of the inner layer has a transition temperature that is higher than the phase change material of the outer layer.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (703) 305-0503. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Ramsey Zacharia
Primary Examiner
Tech Center 1700